U.S. Forest Service.

## RESEARCH NOTE



CENTRAL STATES FOREST EXPERIMENT STATION

COLUMBUS, OHIO

R. D. LANE, DIRECTOR SERVICE

INTERMOUNTAIN STATION

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HANDLE LOG CONSUMPTION IN THE CENTRAL STATES 1962

Thirty-six Central States mills cut almost 15 million board feet of logs and bolts into handles and handle blanks during 1962. This volume was less than 1 percent of the total output of rough forest products from the Central States but most of it came from high-quality hardwood (fig. 1). The estimated value of handle logs consumed by Central States mills in 1962 was more than a million dollars delivered at the mill (table 1).

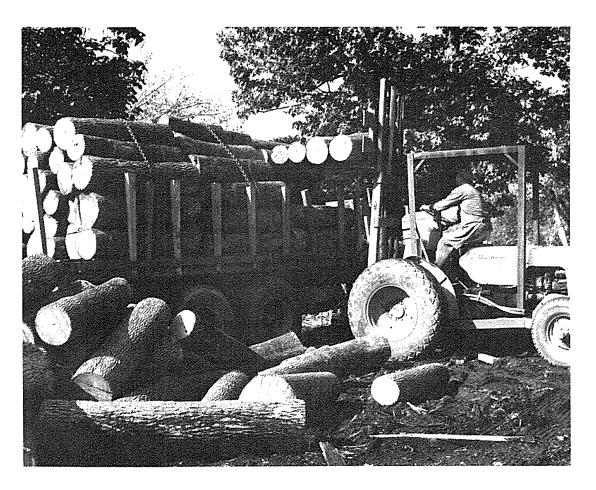


FIGURE 1.--High-quality ash handle bolts on their way to market.

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Table 1.--Number of active mills, volume, and value of handle logs consumed in the Central States, 1962

State	:	Active	:	Volume consumed		:	Value delivered at the mill $\frac{1}{2}$	
**************************************		Number		Thousand board feet 2/	Percent of total		Thousand dollars	
Indiana		7		4,157	28.0		291	
Kentucky		11		3,800	25.6		266	
Ohio		5		3,064	20.7		215	
Missouri and		12		$\frac{3}{3}$ ,802	$\frac{3}{25.7}$		3/266	
Illinois		1		•	_			
Total	•	36	, , , , , , , , , , , , , , , , , , ,	14,823	100.0	***************************************	1,038	

 $<sup>\</sup>frac{1}{2}$  Calculated on the basis of \$70 per thousand board feet. International 1/4-inch log rule.

## Indiana the Leading Consumer

Indiana led the Central States in the consumption of handle logs in 1962, accounting for 28 percent of the total. But Kentucky, Ohio, and Missouri each accounted for more than 20 percent.

Missouri had the most mills active, 12, all of which were located in the southern portion of the State near heavy concentrations of timber (fig. 2). Ohio's five mills were located in the sparsely forested northwestern portion of the State. This is not surprising, however, considering that Ohio mills use a large volume of white ash which is abundant in this area. There were no handle mills located in Iowa in 1962.

The largest consumption by a single mill was 1 3/4 million board feet but the average was about 400,000 board feet.

 $<sup>\</sup>overline{3}/$  Missouri and Illinois combined to prevent disclosure of individual mill consumption.

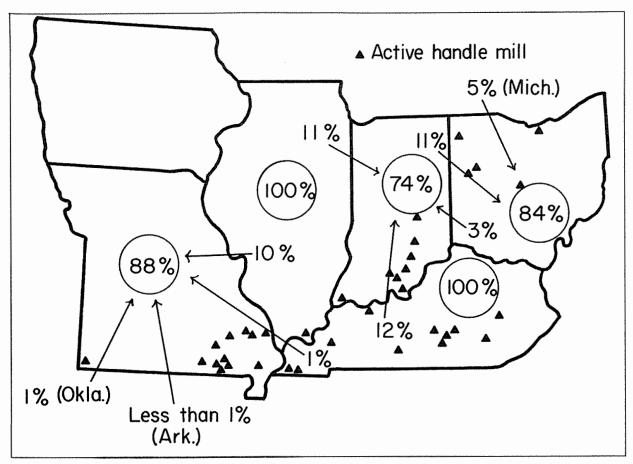


FIGURE 2.--Location of active handle mills and source of handle logs consumed in the Central States, 1962.

## Ash and Hickory, the Principal Species Used

Ash and hickory are the preferred species for handles in this area. Ash, noted for its resilience, is favored for handles of lifting and pulling tools, such as shovels and rakes. Hickory, because of its toughness, is used for striking tools, such as picks and hammers. These two species accounted for more than four-fifths of the handle logs consumed in the region during 1962 (table 2).

More than 40 percent of the ash handle logs consumed in 1962 went to Ohio mills, which use this species almost exclusively. Kentucky mills were the largest consumers of hickory logs, accounting for about half of the regional total.

The handle industry is one of the few outlets for hickory. This timber has been increasing at a rapid rate, presenting a major problem for woodland managers.

Table 2.--Consumption of handle logs by state and species, 1962

(In thousand board feet) 1/

		:	: Percent			
Species	Indiana	Kentucky	Ohio	: Missouri &	: Total	: of : total
Ash	2,255	715	2,936	1,209	7,115	48.0
Hickory	826	2,432	10	1,822	5,090	34.3
Gum	115	91		549	755	5.1
Hard maple	360	115	55		530	3.6
Walnut	256	37	4		297	2.0
Sycamore	****	206		29	235	1.6
Beech ,	23	96	···	84 ·	203	1.4
Other3/	322	108	59	109	598	4.0
Total	4,157	3,800	3,064	3,802	14,823	100.0

<sup>1/</sup> International 1/4-inch log rule.

## Movement of Handle Logs

During 1962, Central States handle mills obtained 86 percent of their logs from the state in which they were located (fig. 2). Another 12 percent came from other Central States, and the remainder, from outside the region. Only in Indiana did mills get more than 25 percent of their handle timber from outside the State. Illinois and Kentucky mills obtained all their logs from their home state. Most of the volume that is moved across state lines goes to mills located just across the line.

Only 230,000 board feet of handle timber was shipped into the Central States in 1962. This was less than 2 percent of the volume consumed. Most of the incoming volume was white ash from Michigan.

David A. Gansner, research forester
Central States Forest Experiment Station
Columbus, Ohio

 $<sup>\</sup>overline{2}/$  Combined to prevent disclosure of individual mill consumption.

 $<sup>\</sup>overline{3}/$  Mainly soft maple and yellow-poplar.